

FIG. 2

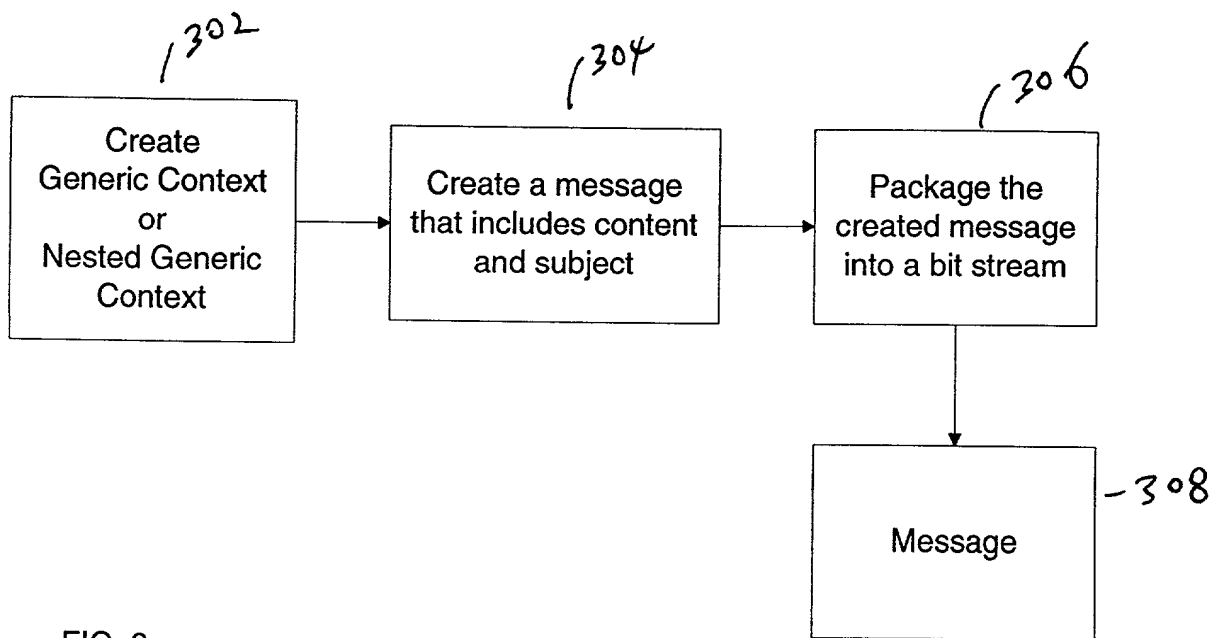


FIG. 3

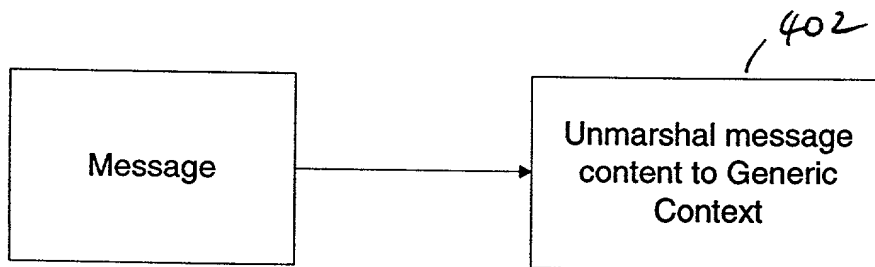


FIG. 4

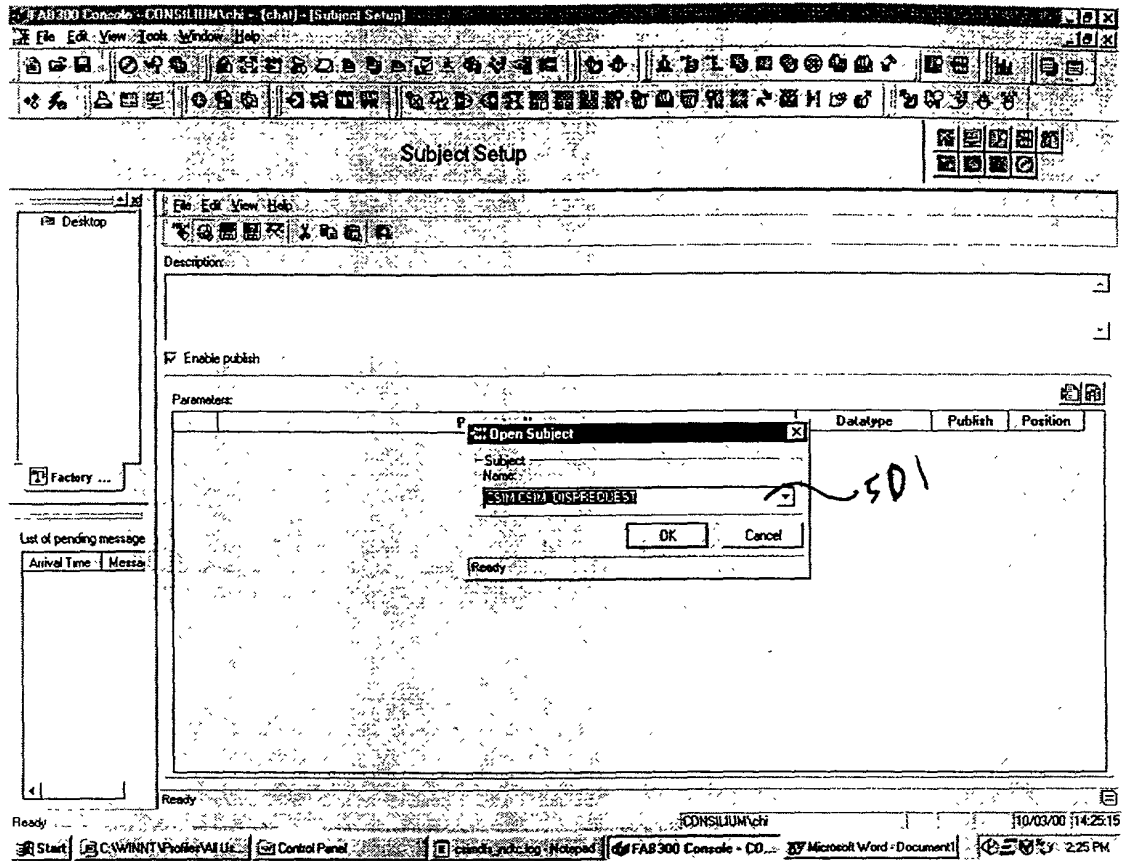


FIG. 5

FAB300 Console - CONSILIUM\chi - [chat] - [Subject Setup - CSIM.CSIM\_DISPREQUEST]

File Edit View Tools Windows Help

Subject Setup - CSIM.CSIM\_DISPREQUEST

Desktop

Factory ...

List of pending message:

Arrival Time	Message

Ready

Parameters:

	Parameter Name	Datatype	Publish	Position
1	batDSNameSpace	String		1
2	batDSName	String		2
3	batDispRequestEvent	String		1
4	DispRequestID	Integer		1
5	batFromDSNameSpace	String		1
6	batFromDSName	String		1
7	DispatchID	Integer		1
8	batObjInternalName	String		1
9	batIndexA	String		1

602

603

604

605

601

Ready

Start C:\WINNT\Profiles\All Users Control Panel

CONSLIUM\chi

10/03/00 14:23:17

FAB300 Console - CO...

2:23 PM

F19.6

Assembly Line 1

Assembly Line Q

...

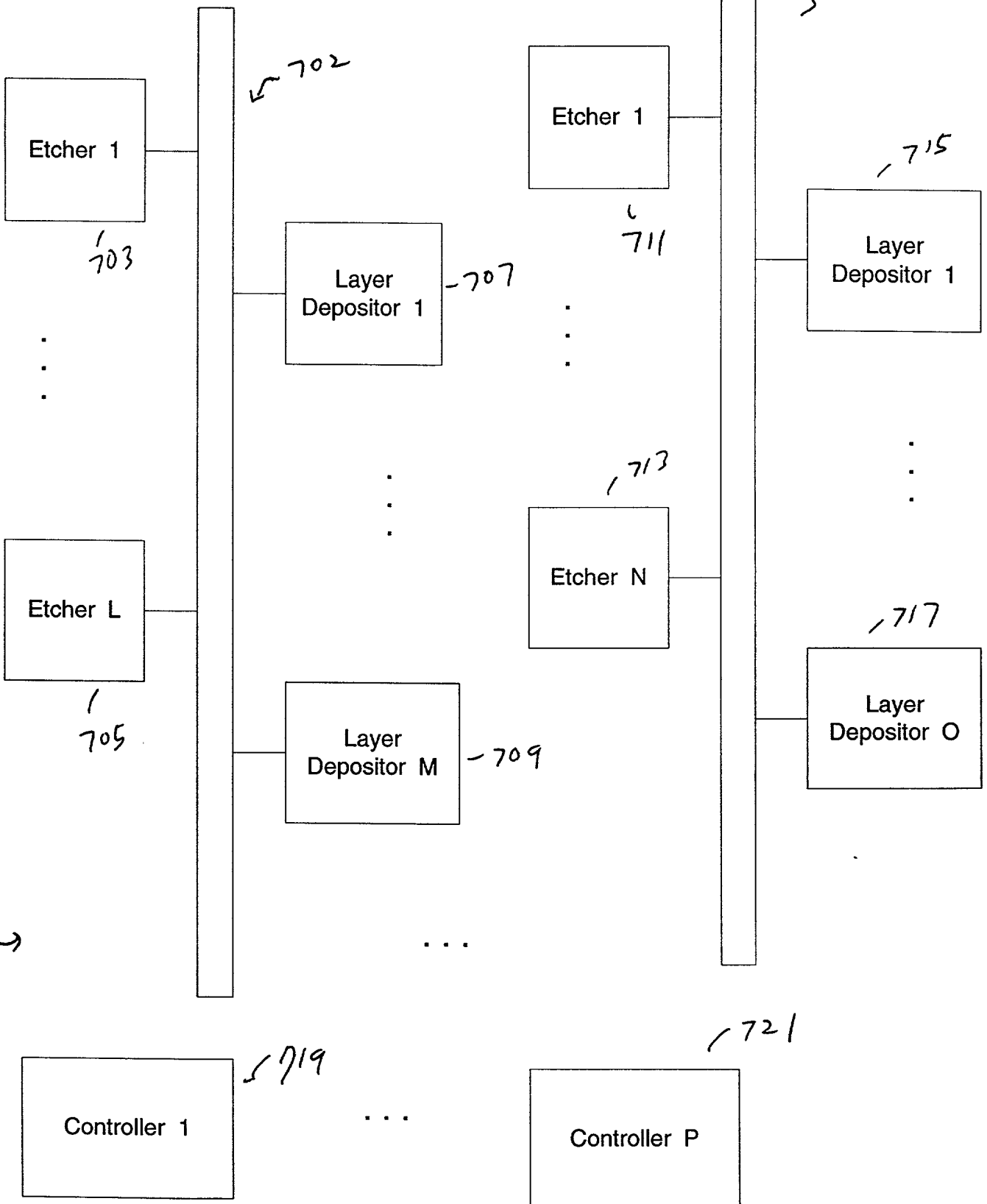


FIG. 7

FIG. 8 is a flowchart illustrating a registration process for assembly line devices and controllers. The process begins with four parallel steps: 801 (Instantiate publisher objects in assembly line devices), 802 (registering subscriber objects in assembly line devices with the ES server), 803 (Instantiate publisher objects in controllers), and 804 (registering subscriber objects in controllers with the ES server). These steps lead to 805 (Registration completed). Following registration, the process enters a loop: 806 (Assembly line devices generate status information and publish it as messages) leads to 807 (The published messages are forwarded to one or more controllers). 807 leads to 808 (The controllers unpack the received messages and generate commands). 808 leads to 809 (The commands are packaged into messages and published). 809 leads to 810 (Messages are fired to one or more ES servers). 810 leads to 811 (The published messages are forwarded by an ES server to one or more assembly line devices). 811 leads to 812 (The assembly line devices unpack the received messages and act upon the commands). 812 leads back to 806, completing the loop.

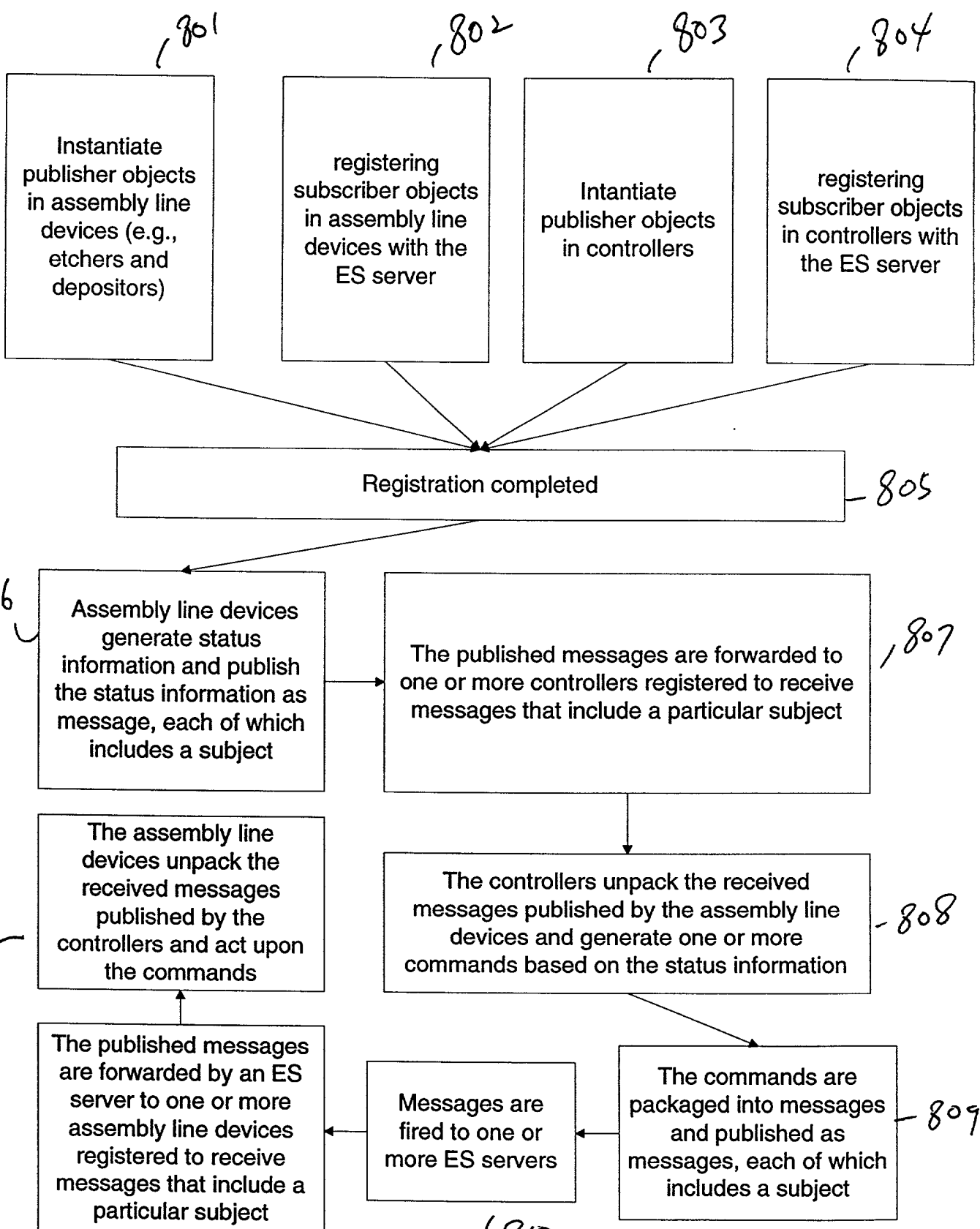


FIG. 8

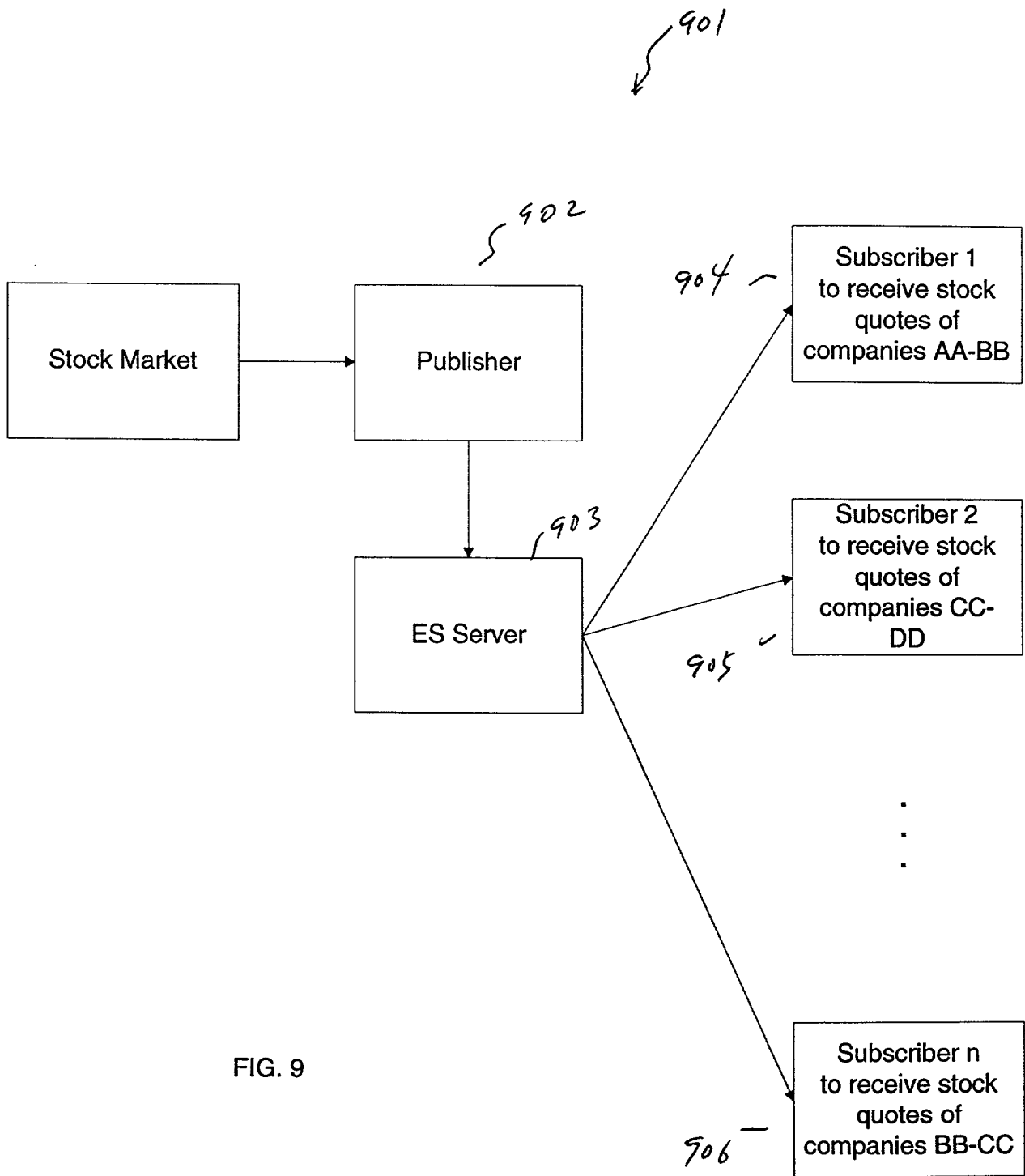


FIG. 9



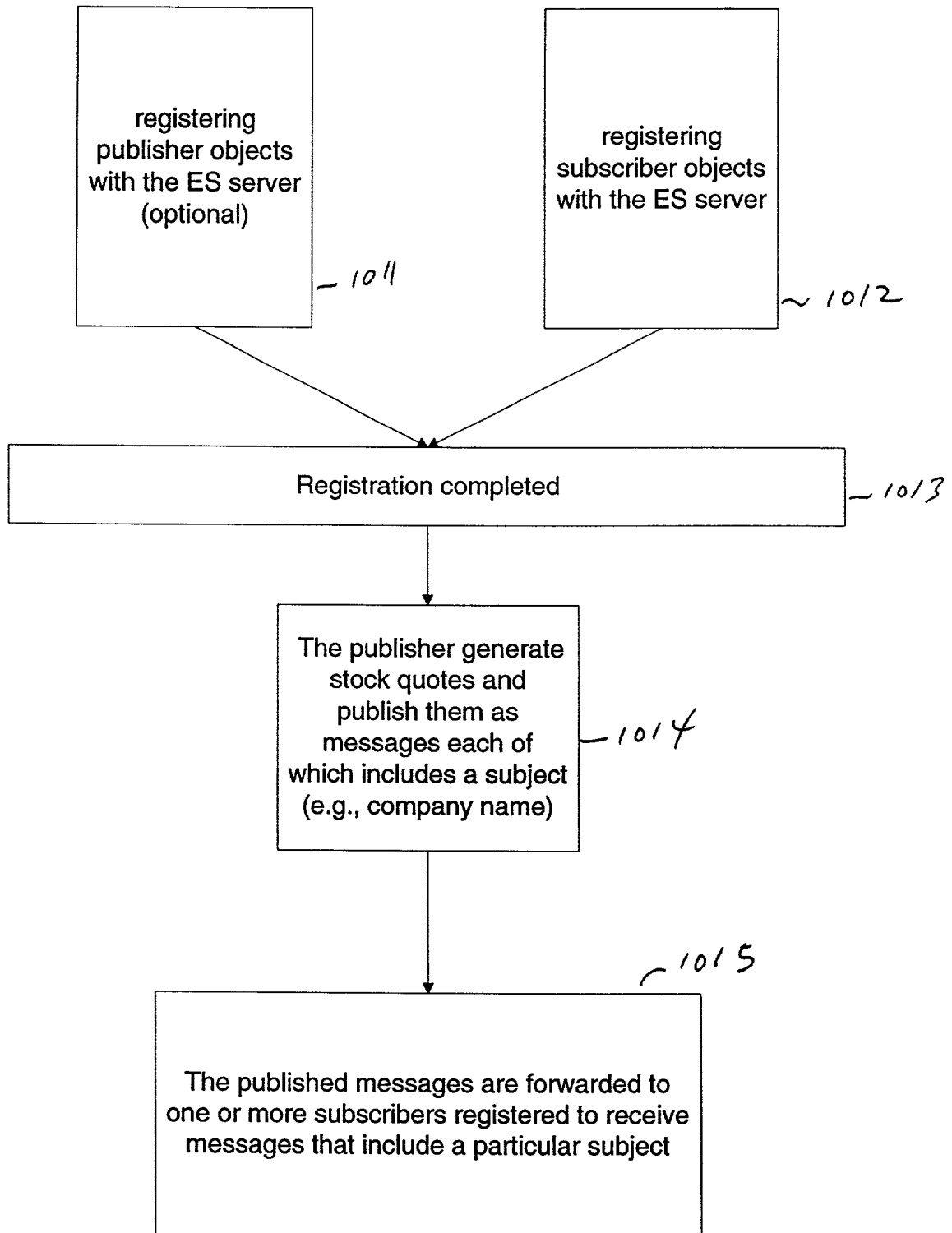


FIG. 10

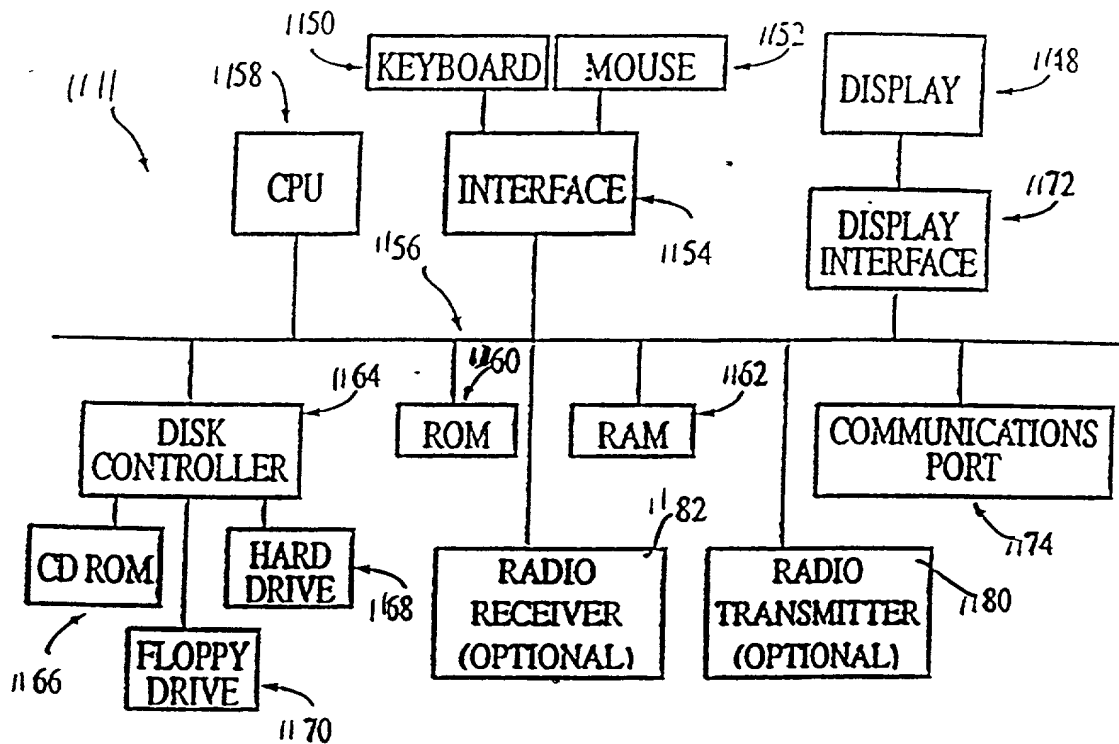


FIG. 11

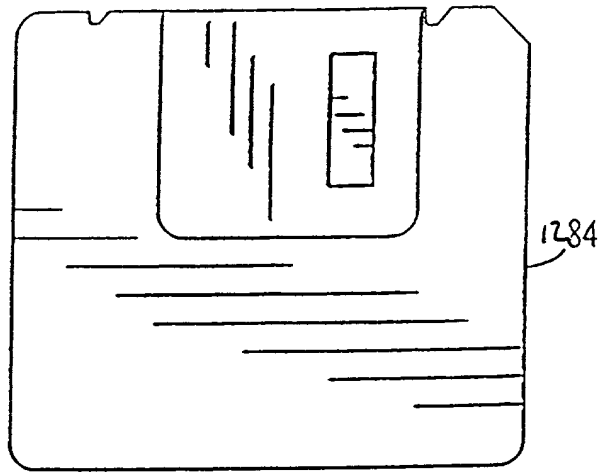


FIG. 12

United States Patent & Trademark Office  
Office of Initial Patent Examination

Application papers not suitable for publication

SN 08/723908 Mail Date 11-29-02

- ☐ Non-English Specification
- ☐ Specification contains drawing(s) on page(s) \_\_\_\_\_ or table(s) 11-19
- ☐ Landscape orientation of text    ☐ Specification    ☐ Claims    ☐ Abstract
- ☐ Handwritten    ☐ Specification    ☐ Claims    ☐ Abstract
- ☐ More than one column    ☐ Specification    ☐ Claims    ☐ Abstract
- ☐ Improper line spacing    ☐ Specification    ☐ Claims    ☐ Abstract
- ☐ Claims not on separate page(s)
- ☐ Abstract not on separate page(s)
- ☐ Improper paper size -- Must be either A4 (21 cm x 29.7 cm) or 8-1/2"x 11"
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| <input type="checkbox"/> Glossy pages         | <input type="checkbox"/> Drawing page(s) _____       |
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|   | <input type="checkbox"/> Claim(s)                    |
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- ☐ Excessive text, drawing(s) \_\_\_\_\_
- ☐ Photographs capable of illustration, drawing(s) \_\_\_\_\_